

CLAIMS

1. Use of a substance that inhibits a pro-inflammatory cytokine for the production of a pharmaceutical composition for treatment of a wound by improving wound healing.

2. Use according to claim 1, wherein said pro-inflammatory cytokine is selected from the group consisting of TNF, IL-1, IL-6, IL-8, IL-12, IL-15, IL-17, IL-18, GM-CSF, M-CSF, MCP-1, MIP-1, RANTES, ENA-78, OSM, FGF, PDGF, and VEGF.

3. Use according to claim 1 or 2, wherein said pro-inflammatory cytokine is selected from the group consisting of TNF and IL-1.

4. Use according to any one of the claims 1 – 3, wherein said pharmaceutical composition is for treatment of posttraumatic tissue injury.

5. Use according to claim 4, wherein said posttraumatic tissue injury is caused by surgery.

6. Use according to any one of the claims 1 – 3, wherein said pharmaceutical composition is for treatment of thermic injury.

7. Use according to any one of the claims 1 – 3, wherein said pharmaceutical composition is for treatment of a wound resulting from a metabolic process due to reduced nutritional supply.

8. Use according to claim 7, wherein said wound is a diabetic ulcer, a leg ulcer, a decubitus ulcer or a gastric ulcer.

9. Use according to any one of the claims 1 - 3, wherein said pharmaceutical composition is for treatment of a wound resulting from exposure to a toxic compound.

10. Use according to any one of the claims 1 – 9, wherein said substance is a monoclonal antibody.

11. Use according to claim 10, wherein said substance is selected from the group consisting of infliximab, CDP-571, D2E7 and CDP-870.

5 12. Use according to any one of the claims 1 – 9, wherein said substance is a soluble cytokine receptor.

13. Use according to claim 12, wherein said substance is etanercept.

10 14. Use according to any one of the claims 1 – 9, wherein said substance is a receptor antagonist.

15 15. Use according to any one of the claims 1 – 9, wherein said substance is an antisense oligonucleotide.

16. Use according to any one of the claims 1 – 9, wherein said substance is an MMP inhibitor selected from the group consisting of tetracyclines, chemically modified tetracyclines, Prinomastat, Batimastat, Marimastat, KB-R7785, TIMP-1, TIMP-2, adTIMP-1, and adTIMP-2.

20 17. Use according to any one of the claims 1 – 9, wherein said substance is an quinolones selected from the group consisting of Norfloxacin, Levofloxacin, Enoxacin, Sparfloxacin, Temafloxacin, Moxifloxacin, Gatifloxacin, Gemifloxacin, Grepafloxacin, Trovafloxacin, Ofloxacin, Ciprofloxacin, Pe-
25 floxacin, Lomefloxacin, and Temafloxacin.

18. Use according to any one of the claims 1 – 9, wherein said substance is a thalidomide derivate selected from the group consisting of CC-1088, CDC-501, CDC-801 and Linomide.

30 19. Use according to any one of the claims 1 – 9, wherein said substance is selected from the group consisting of prostaglandins, phosphodiesterase I, II, III, IV, and V-inhibitors, cyclosporin, pentoxifyllin derivates, hydroxamic acid derivates, melanin and melancortin agonists, and lazaroids.

20. Use according to any one of the claims 1 – 9, wherein said substance is a specific IL-1 α and/or IL-1 β blocking substance.

21. Use according to any one of the claims 1 – 9, wherein said substance is a non-specific IL-1 α and/or IL-1 β blocking substance.

22. Use according to any one of the claims 1 – 9, wherein said substance is lactoferrin or a peptide derived or derivable from lactoferrin.

23. Use according to any one of the claims 1 – 22, wherein said pharmaceutical composition is formulated for localized administration.

24. Use according to any one of the claims 1 – 22, wherein said pharmaceutical composition is formulated for systemical administration.

25. A method for improving wound healing wherein a therapeutically effective amount of a substance that inhibits a pro-inflammatory cytokine is administered to a patient in need of said treatment.

26. A method according to claim 25, wherein said pro-inflammatory cytokine is selected from the group consisting of TNF, IL-1, IL-6, IL-8, IL-12, IL-15, IL-17, IL-18, GM-CSF, M-CSF, MCP-1, MIP-1, RANTES, ENA-78, OSM, FGF, PDGF, and VEGF.

27. A method according to 25 or 26, wherein said pro-inflammatory cytokine is selected from the group consisting of TNF and IL-1.

28. A method according to any one of the claims 25 – 27, for treatment of posttraumatic tissue injury.

29. A method according to claim 28, wherein said posttraumatic tissue injury is caused by surgery.

30. A method according to any one of the claims 25 – 27, for treatment of thermic injury.

31. A method according to any one of the claims 25 – 27, for treatment of a wound resulting from a metabolic process due to reduced nutritional supply.

5 32. A method according to claim 31, for treatment of a diabetic ulcer, a leg ulcer, a decubitus ulcer or a gastric ulcer.

33. A method according to any one of the claims 25 – 27, for treatment of a wound resulting from exposure to a toxic compound.

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34. A method according to any one of the claims 25 – 33, wherein said substance is a monoclonal antibody.

35. A method according to claim 34, wherein said substance is selected
15 from the group consisting of infliximab, CDP-571, D2E7 and CDP-870.

36. A method according to any one of the claims 25 – 33, wherein said substance is a soluble cytokine receptor.

20 37. A method according to claim 36, wherein said substance is etanercept.

38. A method according to any one of the claims 25 – 33, wherein said substance is a receptor antagonist.

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39. A method according to any one of the claims 25 – 33, wherein said substance is an antisense oligonucleotide.

40. A method according to any one of the claims 25 – 33, wherein said
30 substance is an MMP inhibitor selected from the group consisting of tetracyclines, chemically modified tetracyclines, Prinomastat, Batimastat, Marimastat, KB-R7785, TIMP-1, TIMP-2, adTIMP-1, and adTIMP-2.

41. A method according to any one of the claims 25 – 33, wherein said
35 substance is an quinolones selected from the group consisting of Norfloxacin, Levofloxacin, Enoxacin, Sparfloxacin, Temafloxacin, Moxifloxacin, Gatiflox-

acin, Gemifloxacin, Grepafloxacin, Trovafloxacin, Ofloxacin, Ciprofloxacin, Pefloxacin, Lomefloxacin, and Temafloxacin.

5 42. A method according to any one of the claims 25 – 33, wherein said substance is a thalidomide derivate selected from the group consisting of CC-1088, CDC-501, CDC-801 and Linomide.

10 43. A method according to any one of the claims 25 – 33, wherein said substance is selected from the group consisting of prostaglandins, phosphodiesterase I, II, III, IV, and V-inhibitors, cyclosporin, pentoxifyllin derivatives, hydroxamic acid derivatives, melanin and melancortin agonists, and lazaroids.

15 44. A method according to any one of the claims 25 – 33, wherein said substance is a specific IL-1 α and/or IL-1 β blocking substance.

 45. A method according to any one of the claims 25 – 33, wherein said substance is a non-specific IL-1 α and/or IL-1 β blocking substance.

20 46. A method according to any one of the claims 25 – 33, wherein said substance is lactoferrin or a peptide derived or derivable from lactoferrin.

 47. A method according to any one of the claims 25 – 46, wherein said substance is locally administered.

25 48. A method according to any one of the claims 25 – 46, wherein said substance is systemically administered.